

REMARKS

Claims 1-18 are all the claims pending in the application. Applicants thank the Examiner for indicating that claims 7, 9 and 16-18 contain patentable subject matter.

Claims 1-18 are rejected under 35 U.S.C. § 112, second paragraph. Applicants amend the claims to remove any ambiguities.

Claims 10-13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Deck (4,287,924).

Claims 1-6 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Osawa (JP 4-274909) in view of Spragg (5,769,980).

Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Deck (4,287,924).

Analysis

Regarding claim 10, the tire comprises such a construction that the rubber protection sheet is disposed between the rubber reinforcing layer and the carcass ply nearest thereto and within a zone extending inward from a position of a line segment in parallel to the rotating axial line of the tire passing through an outer end by the bead filler rubber in the radial direction of the tire.

On the other hand, the tire disclosed in Deck (US4,287,924) comprises such a construction that the rubber protection sheet (part 20₁, not part 20a indicated by the Examiner) is disposed between the rubber reinforcing layer and the carcass ply nearest thereto, but the rubber

protection sheet is disposed beyond the zone to the end of the belt, and hence the tire of the present invention and the tire of Deck largely differ in the construction of the tire.

Moreover, Applicants refer to the comments filed on August 14, 2001 regarding Deck. While the present invention includes a rubber protection sheet, which by definition is an element which is generally considered to have a uniform and relatively thin thickness, Deck discloses a section shape for the element 20₁, which would be defined as lenticular. One of ordinary skill in the art would not generally define or construe this element as a sheet of material.

For at least the foregoing reasons, claim 10 is not anticipated by Deck.

Regarding claim 1, Applicants respectfully submit that one would not have been motivated to modify Osawa (JP04-274909) to a rubber reinforcing layer in view of Spragg to arrive at the claimed invention because the structure, objectives and concerns of a pneumatic tire are completely different from a run-flat tire, and one would not have been motivated to insert a rubber reinforcing layer in a pneumatic tire such as in Osawa merely based on the teachings of Spragg.

Osawa does not disclose a run-flat tire and does not comprise the rubber reinforcing layer. Thus, the tire of Osawa largely differs from the tire of the present invention in the construction of the tire.

Moreover, the run-flat tire, as disclosed on page 1, lines 15-23 in the original specification, is demanded that when the tire becomes a flat (punctured) state, even if it suddenly occurs during high-speed running on an expressway, the run-flat tire can run at the punctured state over a long distance of 80-160km.

On the contrary, in case of the pneumatic tire as disclosed in Osawa, although the tire occasionally needs to run at the punctured state when being punctured, the tire is satisfactory as long as it can safely run at low speed over a short distance; there is no expectation or demand for it to run at the punctured state at the high speed over the long distance of 80-160km as with the tire of the present invention.

Still further, the service condition in the run-flat tire of the present invention is more severe than that in the pneumatic tire of Osawa.

Furthermore, when comparing the tire having the rubber reinforcing layer with the tire not having the rubber reinforcing layer, the position of the initially generated trouble in the former tire might differ from another position in the latter tire.

In addition, the tire of Osawa comprises the turnup portion of the carcass ply and the position of the outer end thereof is arranged at a position not more than 0.33 times of the carcass height, and as the crack is apt to be generated at a position having the same height as the outer end of the turnup portion in the radial direction, *if* one were to include the rubber reinforcing layer in Osawa, it would need to be properly arranged in relation to the outer end of the turnup portion (Column 2, Lines 3-28 in Osawa).

However, the tire of the present invention does not need to arrange the rubber reinforcing layer in relation to the outer end of the turnup portion at all and for example, may extend to the outer end of the turnup portion beyond the bead portion to the sidewall portion or the end of the belt.

Spragg merely discloses the run-flat tire having the rubber reinforcing layer in the sidewall portion.

In view of the foregoing, the pneumatic tire of Osawa and the run-flat tire of the present invention largely differ in the construction of the tire, the problem to be solved and the technical idea, and hence there is no motivation to combine the application of the pneumatic tire of Osawa with the rim-flat tire of Spragg. Moreover, even if one were to combine the references, one would not have any motivation to position the rubber reinforcing layer as in the present invention.

In view of the foregoing, claim 1 is patentable.

The remaining rejections are directed to the dependent claims. These claims are patentable for at least the same reasons as the independent claims, by virtue of their dependency therefrom.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/443,460

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

1. (Three Times Amended) A run-flat pneumatic tire comprising[:]
a radial carcass extending between a pair of bead cores embedded in the respective bead portions to reinforce a pair of sidewall portions,
a tread portion comprised of one or more rubberized cord plies,
a belt arranged on an outer peripheral surface of the carcass to reinforce the tread portion,
a bead filler rubber taperingly extending from a position just above the bead core toward an end of the tread portion,
a rubber reinforcing layer arranged at an inner surface side of an innermost carcass ply from a position near to the bead core in the bead portion to a position near to the end of the tread portion and having substantially a crescent shape at section thereof, and
at least one rubber protection sheet being [relatively soft] softer than the bead filler rubber, and disposed between the bead filler rubber and the carcass ply surrounding it, within a zone extending inward from a position of a line segment in parallel to the rotating axial line of the tire passing through an outer end by the bead filler rubber in the radial direction of the tire.

9. (Amended) A run-flat pneumatic tire according to claim 1 further comprising a second rubber protection sheet being [relatively soft] softer than the rubber reinforcing layer and disposed between the rubber reinforcing layer and the carcass ply nearest thereto.

10. (Amended) A run-flat pneumatic tire comprising[;] :

- a radial carcass extending between a pair of bead cores embedded in the respective bead portions to reinforce a pair of sidewall portions,
- a tread portion comprised of one or more rubberized cord plies,
- a belt arranged on an outer peripheral surface of the carcass to reinforce the tread portion,

- a bead filler rubber taperingly extending from a position just above the bead core toward an end of the tread portion,
- a rubber reinforcing layer arranged at an inner surface side of an innermost carcass ply from a position near to the bead core in the bead portion to a position near to the end of the tread portion and having substantially a crescent shape at section thereof, and [at least one]
- a rubber protection sheet being [relatively soft] softer than the rubber reinforcing layer and disposed between the rubber reinforcing layer and the carcass ply nearest thereto and within a zone extending inward from a position of a line segment in parallel to the rotating axial line of the tire passing through an outer end by the bead filler rubber in the radial direction of the tire.

12. (Amended) A run-flat pneumatic tire according to claim 10, wherein in a radial section of a tire-rim assembly when the tire is mounted onto a recommended rim and inflated

under a pressure corresponding to 15% of a maximum air pressure, the [at least one] rubber protection sheet is existent over both sides of a straight line drawn from a curvature center of a flange of the recommended rim at an inclination angle 60° outwardly in a radial direction of the tire with respect to a line segment drawn from the curvature center in parallel to a rotating axial line of the tire toward the inside of the tire.

13. (Amended) A run-flat pneumatic tire according to claim 10, wherein the [at least one] rubber protection sheet is existent between line segments in parallel to the rotating axial line of the tire respectively passing through an outer end of the bead filler rubber in the radial direction of the tire and an inner end of the rubber reinforcing layer in the radial direction of the tire.

14. (Amended) A run-flat pneumatic tire according to claim [11] 18, wherein when the [at least one] second rubber protection sheet is disposed along the turnup portion of the carcass ply between the turnup portion and the bead filler rubber, a height of an outer end of the second rubber protection sheet in the radial direction of the tire as measured from an outermost end of the bead core in the radial direction of the tire is not more than two times a height of an intersecting point between the straight line drawn from a curvature center of a flange of the recommended rim at an inclination angle of 60° outwardly in a radial direction of the tire with respect to a line segment drawn from a curvature center in parallel to a rotating axial line of the

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tire toward the inside of the tire and an outer surface of an outermost carcass ply as measured by the above same method.

18. (Amended) A run-flat pneumatic tire according to claim 10, further comprising a second rubber protection sheet being [relatively soft] softer than the bead filler rubber and disposed between the bead filler rubber and the carcass ply surrounding it.